Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 25-34, without prejudice or disclaimer.

1. (Currently Amended) A method for the *in vitro* proliferation of a neural stem cell culture comprising the steps of:

~~(a) obtaining dissociated neural tissue in cell suspension, the suspension containing one or more multipotent neural stem cells capable of producing progeny that are capable of differentiating into neurons and glia;~~

~~(b)~~(a) culturing ~~the~~ a cell suspension containing one or more multipotent neural stem cells capable of producing progeny that are capable of differentiating into neurons and glia in a culture medium containing at least one proliferation-inducing growth factor to proliferate the neural stem cells ~~in (a)~~ to generate a neural stem cell culture comprising aggregated neural stem cells; and

~~(c)~~(b) passaging the cell culture in ~~(b)~~(a) by treating the culture with an amount of a collagenase preparation effective to dissociate the aggregated neural stem cells in the culture and passing the cell culture to a culture medium containing at least one proliferation-inducing growth factor to further proliferate the neural stem cell culture.

2. (Original) The method of claim 1 wherein the amount of the collagenase preparation is between 18-180 mU/ml.

3. (Original) The method of claim 1 wherein the amount of the collagenase preparation is between 54-126 mU/ml.

4. (Original) The method of claim 1 wherein the collagenase preparation further comprises at least one molecule selected from the group consisting of sulfhydryl protease, clostripain, aminopeptidase, or combinations thereof.

5. (Original) The method of claim 1 wherein the collagenase preparation is substantially pure, and contains minimal secondary proteolytic activity.

6. (Original) The process of claim 1, wherein the proliferation-inducing growth factor is selected from the group consisting of epidermal growth factor, amphiregulin, acidic fibroblast growth factor, basic fibroblast growth factor, transforming growth factor alpha, leukocyte inhibitory factor (LIF), glycostatin C and combinations thereof.

7. (Original) The method of claim 1 wherein the neural stem cell culture comprises genetically modified neural stem cells.

8. (Currently Amended) The method of claim 1, further comprising the step of differentiating the neural stem cell culture of ~~(c)~~(b) to produce a cell culture comprising differentiated neural cells selected from the group consisting of astrocytes, neurons, oligodendrocytes, and combinations thereof.

9. (Original) The method of claim 1 or claim 8, further comprising contacting the neural stem cell culture with a biological agent, and determining the effects of the biological agent on cells in the culture.

10. (Original) The method of claim 1 wherein the neural stem cell culture is a suspension culture.

11. (Original) The method of claim 1 wherein the neural stem cell culture is an adhesion culture.

12. (Original) The method of claim 1 wherein the neural stem cell culture comprises human neural stem cells.

13. (Currently Amended) A method for the *in vitro* proliferation of a neural stem cell culture wherein the percent viability of the cells in the culture is at least 60%, the method comprising the steps of:

~~(a) obtaining dissociated neural tissue in cell suspension, the suspension containing one or more multipotent neural stem cells capable of producing progeny that are capable of differentiating into neurons and glia;~~

~~(b)~~(a) culturing ~~the~~ a cell suspension containing one or more multipotent neural stem cells capable of producing progeny that are capable of differentiating into neurons and glia in a culture medium containing at least one proliferation-inducing growth factor to proliferate the neural stem cells in (a) to generate a neural stem cell culture comprising aggregated neural stem cells; and

~~(c)~~(b) passaging the cell culture in ~~(b)~~(a) by treating the culture with an amount of a collagenase preparation effective to dissociate the aggregated neural stem cells in the culture and passing the cell culture to a culture medium containing at least one proliferation-inducing growth factor to further proliferate the neural stem cell culture.

14. (Original) The method of claim 13, wherein the percent viability of the cells in the culture is at least 75% after being passaged.

15. (Original) The method of claim 13, wherein the percent viability of the cells in the culture is at least 85% after being passaged.

16. (Original) The method of claim 13, wherein the amount of the collagenase preparation is between 18-180 mU/ml.

17. (Original) The method of claim 13, wherein the amount of the collagenase preparation is between 54-126 mU/ml.

18. (Original) The method of claim 13, wherein the collagenase preparation further comprises at least one molecule selected from the group consisting of sulfhydryl protease, clostripain, aminopeptidase, or combinations thereof.

19. (Original) The method of claim 13, wherein the collagenase preparation is substantially pure, and contains minimal secondary proteolytic activity.

20. (Original) The method of claim 13, wherein the neural stem cell culture comprises genetically modified neural stem cells.

21. (Currently Amended) The method of claim 13, further comprising the step of differentiating the neural stem cell culture of ~~(c)~~(b) to produce a cell culture comprising differentiated neural cells selected from the group consisting of astrocytes, neurons, oligodendrocytes, and combinations thereof.

22. (Original) The method of claim 13 wherein the neural stem cell culture is a suspension culture.

23. (Original) The method of claim 13 wherein the neural stem cell culture is an adhesion culture.

24. (Original) The method of claim 13 wherein the neural stem cell culture comprises human neural stem cells.

25.-34. (Cancelled)